§ 74.933 Remote control operation.

Licensed ITFS stations may be operated by remote control without further authority.

[52 FR 3806, Feb. 6, 1987]

§ 74.934 Unattended operation.

Unattended operation of licensed ITFS stations is permitted without further authority.

(a) An unattended relay station may be employed to receive and retransmit signals of another station provided that the transmitter is equipped with circuits which permit it to radiate only when the signal intended to be retransmitted is present at the receiver input terminals.

[52 FR 3806, Feb. 6, 1987]

§ 74.935 Power limitations.

(a) The maximum EIRP of an ITFS main or booster station shall not exceed 33 dBW (or, when digital modulation with uniform power spectral density and subchannels or superchannels, or 125 kHz channels, are used, the appropriately adjusted value based upon the ratio of 6 MHz to the subchannel or superchannel, or 125 kHz, bandwidth), except as provided in paragraph (b) of this section.

(b) If a main or booster station sectorizes or otherwise uses one or more transmitting antennas with a non-omnidirectional horizontal plane radiation pattern, the maximum EIRP over a 6 MHz channel in dBW in a given direction shall be determined by the following formula:

EIRP = 33 dBW + 10 log (360/beamwidth) [where 10 log (360/beamwidth) ≤ 6 dB]

Beamwidth is the total horizontal plane beamwidth of the individual transmitting antenna for the station or any sector measured at the half-power points. The first term of the equation above, 33 dBW, must be adjusted appropriately based upon the ratio of 6 MHz to the subchannel or superchannel, or 125 kHz, bandwidth.

(c) An increase in station transmitter power, above currently-authorized or previously-proposed values, to the maximum values provided in paragraphs (a) and (b) of this section, may be authorized, if an applicant demonstrates that the requested power increase will not cause harmful interference to any authorized or previously-proposed co-channel or adjacent-channel station with a transmitter site within 80.5 km (50 miles) of the applicant's transmitter site, or if an applicant demonstrates that:

(1) A station, that must be protected from interference, potentially could suffer interference that would be eliminated by increasing the power of the interfered-with station; and

(2) That the interfered-with station may increase its own power consistent with the rules; and

(3) The applicant requesting authorization of a power increase agrees to pay all expenses associated with the increase in power to the interfered-with station.

(d) For television transmission, the peak power of the accompanying aural signal must not exceed 10 percent of the peak visual power of the transmitter. The Commission may order a reduction in aural signal power to diminish the potential for harmful interference.

[55 FR 46013, Oct. 31, 1990, as amended at 58 FR 44951, Aug. 25, 1993; 63 FR 65117, Nov. 25, 1998]

§ 74.936 Emissions and bandwidth.

(a) An ITFS station may employ amplitude modulation (C3F) for the transmission of the visual signal and frequency modulation (F3E) or (G3E) for the transmission of the aural signal when transmitting a standard analog television signal. Quadrature amplitude modulation, digital vestigial modulation, quadrature phase shift key modulation and code division multiple access emissions may be employed, subject to compliance with the policies set forth in the Declaratory Ruling and Order, 11 FCC Rcd 18839 (1996). The licensee may subchannelize its authorized bandwidth, provided that digital modulation is employed and the aggregate power does not exceed the authorized power for the channel, and may utilize all or a portion of its authorized bandwidth for ITFS response stations authorized pursuant to §74.939. The licensee may also, jointly with affected adjacent channel licensees, transmit